

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An apparatus for preparing sterilizing water comprising an electrolyzer:

wherein an anode chamber (10) and a cathode chamber (20) partitioned by an ion exchange membrane (40) form unit cells (A), is located between said anode chamber (10) and said cathode chamber (20), said unit cells (A) being alternately arranged and brought into close contact with each other;

end plates (60, 70) are placed at an outer surface of a first unit cell and a last unit cell, respectively;

water inlets (61, 62) and water outlets (71, 72) are attached to ~~both~~ each of said end plates (60,70) of said electrolyzer;

said anode chamber (10) includes an anode plate (11) and said cathode chamber (20) includes a cathode plate (21), ~~having~~ said anode plate (11) and said cathode plate (21) have four circulative openings at ~~the vicinity of each edge corner at both sides~~ of which two circulative openings of ~~diagonal direction at diagonally opposite positions~~ have ~~[[fan]]~~ triangle-shaped plural passages~~[[,]]~~ in order for water introduced through the openings to flow through the passages to rapidly pass ~~through each electrode~~ a surface of each anode plate (11) or cathode plate (21); and

an anode reaction chamber (13) and a cathode reaction chamber (23) are formed by a gap-control gasket (30) and ~~[[a]]~~ an electrolyte leakage prevention gasket (31) having plurality of horizontal members at ~~[[the]]~~ a center region.

2. (Currently amended) An apparatus for preparing sterilizing water according to claim 1, wherein an anode passage (12) and a cathode passage (22) formed in each gasket (30, 31) ~~make~~ provide a path for the water from each water inlet (61, 62) to flow through the anode passage (12) and the cathode passage (22), respectively.
3. (Currently amended) An apparatus for preparing sterilizing water according to claim 2, wherein the anode plate (11) is a dimension stable anode (DSA) using an oxygen-generating catalyst or platinum plating on titanium substrate ~~is employed as an anode plate (11).~~
4. (Currently amended) An apparatus for preparing sterilizing water according to claim 2, wherein the cathode plate (21) is a hydrogen-generating catalyst on a stainless steel, nickel, mild steel or titanium substrate ~~is employed as an cathode plate (21).~~
5. (Previously presented) An apparatus for preparing sterilizing water according to claim 3, wherein the oxygen-generating catalyst is iridium or ruthenium.
6. (Previously presented) An apparatus for preparing sterilizing water according to claim 4, wherein the hydrogen-generating catalyst is iridium or ruthenium.

7. (New) An apparatus for preparing sterilizing water comprising an electrolyzer:

said electrolyzer having a plurality of unit cells (A), each of said plurality of unit cells (A) including an anode chamber (10) and a cathode chamber (20), wherein an ion exchange membrane (40), is located between said anode chamber (10) and said cathode chamber (20), said anode chamber (10) and said cathode chamber (20) being alternately arranged, and said plurality of unit cells (A) being in close contact with each other;

said electrolyzer having end plates (60, 70) located at an outer surface of a first unit cell and a last unit cell, respectively;

said electrolyzer having water inlets (61, 62) and water outlets (71, 72) attached to each of said end plates (60,70),

wherein said anode chamber (10) includes an anode plate (11) and said cathode chamber (20) includes a cathode plate (21), each of said anode plate (11) and said cathode plate (21) having at least one circulative opening at a corner thereof such that two circulative openings at diagonally opposite positions have a plurality of triangle-shaped passages in order for water introduced through the openings to flow through the passages to rapidly pass a surface of each anode plate (11) or cathode plate (21); and

wherein an anode reaction chamber (13) and a cathode reaction chamber (23) are formed by a gap-control gasket (30) and an electrolyte leakage prevention gasket (31) located in said anode chamber (10) and said cathode chamber (20), each gasket having plurality of horizontal members at a center region.